



January 20, 2004

EPA Region 5 Records Ctr.



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KA.

Letters to
residents
(from EPA)
went out
1-26-04

Mr. Kevin Adler, RPM
Mail Code SR-J6
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Additional Tables for the 2003 Residential Well Sampling Results
ACS NPL Site, Griffith, Indiana

Dear Kevin:

Please find enclosed several sets of additional tables summarizing the 2003 Residential Well Sampling Results. The first set of tables provides the volatile organic compound (VOC) results at each location over the last four sampling events (2000 through 2003). The second table set summarizes all the organic and inorganic detections for the 2003 sampling results, with associated laboratory and validation flags. The third table set summarizes only the organic and inorganic detections from the 2003 sampling event that were interpreted through the validation process to be actual detections.

The last table provides the current addresses, occupant's names, and phone numbers for each sampling location as of September 2003. We will be emailing you Adobe® Reader files of these tables so that you can make copies for your use.

Sincerely,

MWH Americas, Inc.

Peter J. Vagt, Ph.D., CPG
Vice President

cc: Barbara Magel, Karaganis White & Magel, Ltd.
File

Enclosures: Table Set 1 – Historical VOC Results
Table Set 2 – Summary of All Detections
Table Set 3 – Summary of Interpreted Actual Detections
Residential Well Sampling Information

CAS/emp/PJV/emp
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TABLE SET 1

Provides historical VOC detections in residential wells from 2000 through 2003.

Table 1 – Historical VOC Detections in Residential Well PW-A

Table 2 – Historical VOC Detections in Residential Well PW-B

Table 3 – Historical VOC Detections in Residential Well PW-C

Table 4 – Historical VOC Detections in Residential Well PW-D

Table 5 – Historical VOC Detections in Residential Well PW-Y

Table 1
Historical VOC Detections in Residential Well PW-A
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-A | | | PW-A | | PW-A | | PW-A | |
|---------------------------------------|-----------------|--------|-------|-----|--------|----|--------|----|--------|------|
| | | Sep-03 | | RL | Sep-02 | RL | Sep-01 | RL | Sep-00 | RL |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | 0.2 | JB/UB | 0.5 | NS | | NS | | | |
| 1,1,2-Trichloroethane | 5 | | | | NS | | NS | | | |
| 2-Butanone | 5 | | | | NS | | NS | | 4 | J/ 5 |
| 4-Methyl-2-pentanone | NA | | | | NS | | NS | | | |
| Acetone | NA | 1.5 | J/ | 3 | NS | | NS | | | |
| Bromodichloromethane | NA | | | | NS | | NS | | | |
| Carbon Disulfide | NA | | | | NS | | NS | | | |
| Chlorobenzene | 100 | 0.057 | J/ | 0.5 | NS | | NS | | | |
| Chloroform | NA | 0.035 | J/ | 0.5 | NS | | NS | | | |
| Dibromochloromethane | NA | | | | NS | | NS | | | |
| Ethylbenzene | 700 | | | | NS | | NS | | | |
| Methylene Chloride | NA | 0.48 | JB/UB | 0.5 | NS | | NS | | | |
| Toluene | 1,000 | 0.43 | JB/UB | 0.5 | NS | | NS | | | |
| Tetrachloroethene | 5 | 0.043 | J/ | 0.5 | NS | | NS | | | |
| Xylene (total) | 10,000 | 0.091 | J/ | 0.5 | NS | | NS | | | |

NA

Italics text = Considered below detection limits due to detection in laboratory blank

All concentrations in parts per billions (ppb) or micrograms per liter (ug/l)

MCL = Maximum Contamination Level

NA = No MCL exists for this compound

RL = Laboratory Reporting Limit

NS = Not sampled, well not operating

U = Compound considered not detected above concentration listed

J = Estimated value

B = Compound was detected in sample and in associated blank.

Table 2
Historical VOC Detections in Residential Well PW-B
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-B | | | PW-B | | | PW-B | | | PW-B | | |
|---------------------------------------|-----------------|--------|-------|-----|--------|-------|-----|--------|-----|----|--------|--|----|
| | | Sep-03 | | RL | Sep-02 | | RL | Sep-01 | | RL | Sep-00 | | RL |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | 0.22 | JB/UB | 0.5 | | | | | | | | | |
| 1,1,2-Trichloroethane | 5 | | | | | | | | | | | | |
| 2-Butanone | 5 | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | NA | | | | | | | | | | | | |
| Acetone | NA | 1.4 | J/ | 3 | 2.0 | JB/UB | 3 | | | | | | |
| Bromodichloromethane | NA | | | | | | | | | | | | |
| Carbon Disulfide | NA | | | | | | | | | | | | |
| Chlorobenzene | 100 | 0.04 | J/ | 0.5 | | | | | | | | | |
| Chloroform | NA | | | | | | | | | | | | |
| Dibromochloromethane | NA | | | | | | | | | | | | |
| Ethylbenzene | 700 | | | | | | | | | | | | |
| Methylene Chloride | NA | 0.45 | JB/UB | 0.5 | 0.5 | B/UB | 0.5 | | | | | | |
| Toluene | 1,000 | 0.35 | JB/UB | 0.5 | 0.1 | JB/UB | 0.5 | 0.1 | JB/ | 1 | | | |
| Tetrachloroethene | 5 | | | | | | | | | | | | |
| Xylene (total) | 10,000 | 0.068 | J/ | 0.5 | 0.07 | JB/UB | 0.5 | | | | | | |
| Chloromethane | NA | | | | 0.3 | J/UB | 0.5 | | | | | | |
| Bromomethane | NA | | | | | | | 0.1 | J/ | 1 | | | |
| 1,2,4-Trichlorobenzene | 70 | | | | | | | 0.1 | JB/ | 1 | | | |

Italics text = Considered below detection limits due to detection in laboratory blank

All concentrations in parts per billions (ppb) or micrograms per liter (ug/l)

MCL = Maximum Contamination Level

NA = No MCL exists for this compound

RL = Laboratory Reporting Limit

U = Compound considered not detected above concentration listed

J = Estimated value

B = Compound was detected in sample and in associated blank.

Table 3
Historical VOC Detections in Residential Well PW-C
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-C | | PW-C | | PW-C | | PW-C | |
|---------------------------------------|-----------------|------------|-----|-----------|-----|--------|----|--------|----|
| | | Sep-03 | RL | Sep-02 | RL | Sep-01 | RL | Sep-00 | RL |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | 0.25 JB/UB | 0.5 | | | | | | |
| 1,1,2-Trichloroethane | 5 | 0.78 | 0.5 | | | | | | |
| 2-Butanone | 5 | | | | | | | 0.2 J/ | 5 |
| 4-Methyl-2-pentanone | NA | | | | | | | | |
| Acetone | NA | 1.2 J/ | 3 | 2 JB/UB | 3 | | | | |
| Bromodichloromethane | NA | | | | | | | | |
| Carbon Disulfide | NA | 0.19 J/ | 0.5 | | | | | | |
| Chlorobenzene | 100 | 0.04 J/ | 0.5 | 0.03 J/ | 0.5 | | | | |
| Chloroform | NA | 0.063 J/ | 0.5 | | | | | | |
| Dibromochloromethane | NA | | | | | | | | |
| Ethylbenzene | 700 | | | | | | | | |
| Methylene Chloride | NA | 0.53 B/UB | 0.5 | 0.5 B/UB | 0.5 | | | | |
| Toluene | 1,000 | 0.31 JB/UB | 0.5 | 0.2 JB/UB | 0.5 | | | | |
| Tetrachloroethene | 5 | | | | | | | | |
| Xylene (total) | 10,000 | | | | | | | | |
| Chloromethane | NA | | | 0.1 J/UB | 0.5 | | | | |

Italics text = Considered below detection limits due to detection in laboratory blank

All concentrations in parts per billions (ppb) or micrograms per liter (ug/l)

MCL = Maximum Contamination Level

NA = No MCL exists for this compound

RL = Laboratory Reporting Limit

U = Compound considered not detected above concentration listed

J = Estimated value

B = Compound was detected in sample and in associated blank.

Table 4
Historical VOC Detections in Residential Well PW-D
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-D | | | PW-D | | | PW-D | | PW-D | |
|---------------------------------------|-----------------|--------|-------|-----|--------|-------|-----|--------|-------|--------|------|
| | | Sep-03 | | RL | Sep-02 | | RL | Sep-01 | RL | Sep-00 | RL |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | 0.22 | JB/UB | 0.5 | | | | | | | |
| 1,1,2-Trichloroethane | 5 | | | | | | | | | | |
| 2-Butanone | 5 | | | | | | | | | | |
| 4-Methyl-2-pentanone | NA | | | | | | | | | | |
| Acetone | NA | 1.8 | J/ | 3 | 2 | JB/UB | 3 | | | | |
| Bromodichloromethane | NA | | | | | | | | | | |
| Carbon Disulfide | NA | 0.08 | J/ | 0.5 | | | | | | 0.08 | J/ 2 |
| Chlorobenzene | 100 | | | | | | | | | | |
| Chloroform | NA | | | | | | | | | | |
| Dibromochloromethane | NA | | | | | | | | | | |
| Ethylbenzene | 700 | | | | | | | | | | |
| Methylene Chloride | NA | 0.52 | B/UB | 0.5 | 0.5 | B/UB | 0.5 | | | 0.50 | J/ 2 |
| Toluene | 1,000 | 0.33 | JB/UB | 0.5 | 0.1 | JB/UB | 0.5 | 0.1 | JB/ 1 | | |
| Tetrachloroethene | 5 | 0.046 | J/ | 0.5 | | | | | | | |
| Xylene (total) | 10,000 | | | | 0.09 | JB/UB | 0.5 | | | | |
| Chloromethane | NA | | | | 0.3 | JB/UB | 0.5 | | | | |
| Bromomethane | NA | | | | 0.1 | JB/UB | 0.5 | | | | |

Italics text = Considered below detection limits due to detection in laboratory blank

All concentrations in parts per billions (ppb) or micrograms per liter (ug/l)

MCL = Maximum Contamination Level

NA = No MCL exists for this compound

RL = Laboratory Reporting Limit

U = Compound considered not detected above concentration listed

J = Estimated value

B = Compound was detected in sample and in associated blank.

Table 5
Historical VOC Detections in Residential Well PW-Y
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-Y | | PW-Y | | PW-Y | | PW-Y | |
|---------------------------------------|-----------------|-------------|-----|------------|-----|---------|----|---------|----|
| | | Sep-03 | RL | Sep-02 | RL | Sep-01 | RL | Sep-00 | RL |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | 0.13 JB/UB | 0.5 | | | | | | |
| 1,1,2-Trichloroethane | 5 | | | | | | | | |
| 2-Butanone | 5 | | | | | | | | |
| 4-Methyl-2-pentanone | NA | 1.5 J/ | 3 | | | | | | |
| Acetone | NA | 1.8 JB/UB | 3 | 2 JB/UB | 3 | | | 8.0 | 2 |
| Bromodichloromethane | NA | 5.5 * | 0.5 | | | | | | |
| Carbon Disulfide | NA | | | | | | | | |
| Chlorobenzene | 100 | 0.036 JB/UB | 0.5 | | | | | | |
| Chloroform | NA | 8.1 * | 0.5 | | | | | | |
| Dibromochloromethane | NA | 3.1 * | 0.5 | | | | | | |
| Ethylbenzene | 700 | 0.057 JB/UB | 0.5 | | | | | | |
| Methylene Chloride | NA | 0.62 B/UB | 0.5 | 0.6 B/UB | 0.5 | | | 0.50 J/ | 2 |
| Toluene | 1,000 | 0.21 JB/UBJ | 0.5 | 0.1 JB/UB | 0.5 | 0.2 JB/ | 1 | | |
| Tetrachloroethene | 5 | 0.055 J/ | 0.5 | | | | | | |
| Xylene (total) | 10,000 | 0.36 JB/UB | 0.5 | 0.09 JB/UB | 0.5 | | | | |
| Chloromethane | NA | | | 0.4 JB/UB | 0.5 | | | | |
| 1,2,4-Trichlorobenzene | | | | | | 0.3 JB/ | 1 | | |

Italics text = Considered below detection limits due to detection in laboratory blank

All concentrations in parts per billions (ppb) or micrograms per liter (ug/l)

MCL = Maximum Contamination Level

NA = No MCL exists for this compound

RL = Laboratory Reporting Limit

* = likely by-products of chlorination process.

U = Compound considered not detected above concentration listed

J = Estimated value

B = Compound was detected in sample and in associated blank.

TABLE SET 2

Provides a summary of all detections of organic and inorganic compounds for September 2003, with associated laboratory and validation flags.

Summary of Detections in Residential Well PW-A

Summary of Detections in Residential Well PW-B

Summary of Detections in Residential Well PW-C

Summary of Detections in Residential Well PW-D

Summary of Detections in Residential Well PW-Y

Summary of Detections in Residential Well PW-A
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Analytical Parameter | U.S. EPA MCL | Sep-03 | | | | Nov-03 | | | |
|---------------------------------|-----------------|---------|-----|-----|-------|---|----|----|----|
| | | Results | LQ | DQ | RL | Results | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | | | | | |
| Acetone | NA | 1.5 | J | | 3 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Chlorobenzene | 100 | 0.057 | J | | 0.5 | | | | |
| Chloroform | NA | 0.035 | J | | 0.5 | | | | |
| Methylene Chloride | NA | 0.48 | JB | UB | 0.5 | | | | |
| Toluene | 1,000 | 0.43 | JB | UB | 0.5 | | | | |
| Tetrachloroethene | 5 | 0.043 | J | | 0.5 | | | | |
| Xylenes | 10,000 | 0.091 | J | | 0.5 | | | | |
| Semi-Volatile Organic Compounds | | | | | | | | | |
| Pentachlorophenol | 1 | 15 | | | 5 | | U | | 5 |
| Phenanthrene | NA | 1.3 | J | | 5 | | U | | 5 |
| Pyrene | NA | 0.73 | J | | 5 | | U | | 5 |
| PCBs/Pesticides | | | | | | | | | |
| 4,4'-DDT | NA | 0.0003 | JP | J | 0.02 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| alpha-Chlordane | 2 | 0.0019 | BJP | UBJ | 0.01 | | | | |
| Dieldrin | NA | 0.00093 | BJP | UBJ | 0.02 | | | | |
| Endosulfan sulfate | NA | 0.00045 | JP | J | 0.02 | | | | |
| Endrin | 2 | 0.0017 | J | J | 0.02 | | | | |
| Endrin aldehyde | NA | 0.00099 | JP | J | 0.02 | | | | |
| Endrin ketone | NA | 0.00098 | BJP | UBJ | 0.02 | | | | |
| gamma-Chlordane | 2 | 0.00058 | JP | J | 0.01 | | | | |
| Inorganics | | | | | | | | | |
| Barium | 2,000 | 140 | | B | 10 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Calcium | NA | 87,400 | | B | 5,000 | | | | |
| Copper | 1,300 | 4.0 | B | UB | 5 | | | | |
| Iron | NA | 2,200 | | | 100 | | | | |
| Lead | 15 | 1.5 | B | UB | 3 | | | | |
| Magnesium | NA | 45,600 | | B | 5,000 | | | | |
| Manganese | NA | 36.9 | | B | 10 | | | | |
| Potassium | NA | 3,230 | B | UB | 5000 | | | | |
| Selenium | 50 | 2.5 | UN | | 5 | | | | |
| Sodium | NA | 20,400 | | B | 5,000 | | | | |
| Thallium | 2 | 3.7 | UN | UJ | 10 | | | | |
| Vanadium | NA | 1.7 | B | UB | 20 | | | | |
| Zinc | NA | 22.2 | E | UBJ | 20 | | | | |

Notes:

All results in micrograms per liter (ug/l)
A blank cell indicates parameter not detected
Only detected compounds listed.
Gray shaded boxes indicate compound not analyzed
Bold result indicates exceedance of MCL
MCL = Maximum Contaminant Level
NA = MCL does not exist for this analyte
RL = Reporting Limit
LQ = Data qualifier added by laboratory (see below)
DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL
J, B(inorganics only) = Estimated value
B = Indicates analyte detected in laboratory blank
N = Sample spike recovery was outside of control limits
P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.
E = Serial dilution not within 10%. Concentration is estimated.

DV Column Flags

U = Compound considered not detected above listed concentration
B = Compound was detected in sample and in associated blank.
J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-B
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA | PW-B | | | |
|---------------------------------|----------|--------|-----|-----|-------|
| | MCL | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| Acetone | NA | 1.4 | J | | 3 |
| Chlorobenzene | 100 | 0.04 | J | | 0.5 |
| Methylene Chloride | NA | 0.45 | JB | UB | 0.5 |
| Toluene | 1,000 | 0.35 | JB | UB | 0.5 |
| Xylene (total) | 10,000 | 0.068 | J | | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| alpha-Chlordane | 2 | 0.0031 | BJP | UBJ | 0.01 |
| alpha-BHC | 0.2 | 0.0011 | JP | J | 0.01 |
| Dieldrin | NA | 0.0012 | BJ | UB | 0.02 |
| Endrin ketone | NA | 0.0046 | BJP | UBJ | 0.02 |
| Inorganics | | | | | |
| Barium | 2,000 | 136 | | UB | 10 |
| Calcium | NA | 86,700 | | B | 5,000 |
| Chromium | 100 | 1.4 | B | UB | 5 |
| Copper | 1,300 | 48.1 | | B | 5 |
| Iron | NA | 3,080 | | | 100 |
| Lead | 15 | 12.9 | | B | 3 |
| Magnesium | NA | 41,700 | | B | 5,000 |
| Manganese | NA | 59.5 | | B | 10 |
| Nickel | NA | 1.1 | B | | 5 |
| Potassium | NA | 2,730 | B | UB | 5,000 |
| Selenium | 50 | 2.5 | UN | | 5 |
| Silver | NA | 1 | B | | 5 |
| Sodium | NA | 20,200 | | B | 5,000 |
| Thallium | 2 | 3.7 | UN | UJ | 10 |
| Vanadium | NA | 1.7 | B | UB | 20 |
| Zinc | NA | 25.3 | E | UBJ | 20 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL

J, B(inorganics only) = Estimated value

B = Indicates analyte detected in laboratory blank

N = Sample spike recovery was outside of control limits

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

E = Serial dilution not within 10%. Concentration is estimated.

DV Column Flags

U = Compound considered not detected above listed concentration

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-C
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA | PW-C | | | |
|--|----------|---------|-----|-----|-------|
| | MCL | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| 1,1,2-Trichloroethane | 5 | 0.78 | | | 0.5 |
| Acetone | NA | 1.2 | J | | 3 |
| Carbon Disulfide | NA | 0.19 | J | | 0.5 |
| Chlorobenzene | 100 | 0.04 | J | | 0.5 |
| Chloroform | NA | 0.063 | J | | 0.5 |
| Methylene Chloride | NA | 0.53 | B | UB | 0.5 |
| Toluene | 1,000 | 0.31 | JB | UB | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| alpha-Chlordane | 2 | 0.0008 | BJP | UBJ | 0.01 |
| Dieldrin | NA | 0.00026 | BJP | UBJ | 0.02 |
| Endrin ketone | NA | 0.00046 | BJP | UBJ | 0.02 |
| gamma-Chlordane | 2 | 0.00042 | JP | J | 0.01 |
| Inorganics | | | | | |
| Barium | 2,000 | 170 | | B | 10 |
| Calcium | NA | 89,100 | | B | 5,000 |
| Chromium | 100 | 1 | B | UB | 5 |
| Iron | NA | 2,640 | | | 100 |
| Magnesium | NA | 51,400 | | B | 5,000 |
| Manganese | NA | 36.9 | | B | 10 |
| Potassium | NA | 3,370 | B | UB | 5,000 |
| Selenium | 50 | 2.5 | UN | | 5 |
| Sodium | NA | 19,700 | | B | 5,000 |
| Thallium | 2 | 3.7 | UN | UJ | 10 |
| Vanadium | NA | 2 | B | UB | 20 |
| Zinc | NA | 9.8 | BE | UBJ | 20 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL

J, B(inorganics only) = Estimated value

B = Indicates analyte detected in laboratory blank

N = Sample spike recovery was outside of control limits

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

E = Serial dilution not within 10%. Concentration is estimated.

DV Column Flags

U = Compound considered not detected above listed concentration

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-D
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| | U.S. EPA | PW-D | | | |
|---------------------------------|----------|---------|-----|-----|-------|
| Parameter | MCL | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| Acetone | NA | 1.8 | J | | 3 |
| Carbon Disulfide | NA | 0.08 | J | | 0.5 |
| Methylene Chloride | NA | 0.52 | B | UB | 0.5 |
| Toluene | 1,000 | 0.33 | JB | UB | 0.5 |
| Tetrachloroethene | 5 | 0.046 | J | | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| alpha-Chlordane | 2 | 0.0012 | BJP | UBJ | 0.01 |
| beta-BHC | 0.2 | 0.00086 | BJP | UBJ | 0.01 |
| Dieldrin | NA | 0.0012 | BJP | UBJ | 0.02 |
| Endrin ketone | NA | 0.00029 | BJP | UBJ | 0.02 |
| Inorganics | | | | | |
| Barium | 2,000 | 160 | | B | 10 |
| Calcium | NA | 96,100 | | B | 5,000 |
| Iron | NA | 2,440 | | | 100 |
| Magnesium | NA | 50,400 | | B | 5,000 |
| Manganese | NA | 36.8 | | B | 10 |
| Potassium | NA | 3,310 | B | UB | 5,000 |
| Selenium | 50 | 2.5 | UN | | 5 |
| Sodium | NA | 19,600 | | B | 5,000 |
| Thallium | 2 | 3.7 | UN | UJ | 10 |
| Vanadium | NA | 2.1 | B | UB | 20 |
| Zinc | NA | 16.7 | BE | UBJ | 20 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL

J, B(inorganics only) = Estimated value

B = Indicates analyte detected in laboratory blank

N = Sample spike recovery was outside of control limits

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

E = Serial dilution not within 10%. Concentration is estimated.

DV Column Flags

U = Compound considered not detected above listed concentration

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-Y
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| | U.S. EPA | Sep-03 | | | | Nov-03 | | | |
|---------------------------------|----------|---------|-----|-----|-------|---|----|----|----|
| Parameter | MCL | Results | LQ | DQ | RL | Results | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | | | | | |
| 4-Methyl-2-pentanone | NA | 1.5 | J | | 3 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Acetone | NA | 1.8 | JB | UB | 3 | | | | |
| Bromodichloromethane | NA | 5.5 | | | 0.5 | | | | |
| Chlorobenzene | 100 | 0.036 | JB | UB | 0.5 | | | | |
| Chloroform | NA | 8.1 | | | 0.5 | | | | |
| Dibromochloromethane | NA | 3.1 | | | 0.5 | | | | |
| Ethylbenzene | 700 | 0.057 | JB | UB | 0.5 | | | | |
| Methylene Chloride | NA | 0.62 | B | UB | 0.5 | | | | |
| Toluene | 1,000 | 0.21 | JB | UBJ | 0.5 | | | | |
| Tetrachloroethene | 5 | 0.055 | JB | UB | 0.5 | | | | |
| Xylene (total) | 10,000 | 0.36 | JB | UB | 0.5 | | | | |
| Semi-Volatile Organic Compounds | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 6 | 1.2 | JB | UB | 5 | | U | | 5 |
| Pentachlorophenol | 1 | 2.7 | J | | 5 | | U | | 5 |
| PCBs/Pesticides | | | | | | | | | |
| beta-BHC | 0.2 | 0.0027 | BJP | UBJ | 0.01 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| delta-BHC | 0.2 | 0.004 | JP | J | 0.009 | | | | |
| Dieldrin | NA | 0.0013 | BJP | UBJ | 0.02 | | | | |
| Endosulfan I | NA | 0.0022 | J | | 0.01 | | | | |
| Endosulfan II | NA | 0.0022 | J | | 0.02 | | | | |
| Endosulfan sulfate | NA | 0.00091 | JP | J | 0.02 | | | | |
| Endrin ketone | NA | 0.002 | BJP | UBJ | 0.02 | | | | |
| Inorganics | | | | | | | | | |
| Aluminum | NA | 70.1 | B | | 200 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Barium | 2,000 | 24.8 | | UB | 10 | | | | |
| Calcium | NA | 37,700 | | B | 5,000 | | | | |
| Copper | 1,300 | 56.7 | | B | 5 | | | | |
| Cyanide | 200 | 2.2 | B | | 10 | | | | |
| Iron | NA | 24 | B | | 100 | | | | |
| Lead | 15 | 2.6 | B | UB | 3 | | | | |
| Magnesium | NA | 11,900 | | B | 5,000 | | | | |
| Manganese | NA | 3.0 | B | UB | 10 | | | | |
| Potassium | NA | 2,410 | B | UB | 5,000 | | | | |
| Selenium | 50 | 2.5 | UN | | 5 | | | | |
| Sodium | NA | 9,090 | | UB | 5,000 | | | | |
| Thallium | 2 | 3.7 | UN | UJ | 10 | | | | |
| Vanadium | NA | 1.2 | B | UB | 20 | | | | |
| Zinc | NA | 273 | E | J | 20 | | | | |

Notes:

All results in micrograms per liter (ug/l)
A blank cell indicates parameter not detected
Only detected compounds listed.
Gray shaded boxes indicate compound not analyzed
Bold result indicates exceedance of MCL
MCL = Maximum Contaminant Level
NA = MCL does not exist for this analyte
RL = Reporting Limit
LQ = Data qualifier added by laboratory (see below)
DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL
J, B (inorganics only) = Estimated value
B = Indicates analyte detected in laboratory blank
N = Sample spike recovery was outside of control limits
P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.
E = Serial dilution not within 10%. Concentration is estimated.

DV Column Flags

U = Compound considered not detected above listed concentration
B = Compound was detected in sample and in associated blank.
J = Concentration considered to be an estimated value.

TABLE SET 3

Provides an interpreted list of actual detections of organic and inorganic compounds for September 2003, based on validation flags. For example, those detections flagged with "UB" in Table Set 2 are not included in these tables, since the result is interpreted to be below the listed concentration due to laboratory blank interference.

Summary of Detections in Residential Well PW-A

Summary of Detections in Residential Well PW-B

Summary of Detections in Residential Well PW-C

Summary of Detections in Residential Well PW-D

Summary of Detections in Residential Well PW-Y

Summary of Detections in Residential Well PW-A
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Analytical Parameter | U.S. EPA MCL | Sep-03 | | | | Nov-03 | | | |
|---------------------------------|-----------------|---------|----|----|-------|--|----|----|----|
| | | Results | LQ | DQ | RL | Results | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | | | | | |
| Acetone | NA | 1.5 | J | | 3 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Chlorobenzene | 100 | 0.057 | J | | 0.5 | | | | |
| Chloroform | NA | 0.035 | J | | 0.5 | | | | |
| Tetrachloroethene | 5 | 0.043 | J | | 0.5 | | | | |
| Xylenes | 10,000 | 0.091 | J | | 0.5 | | | | |
| Semi-Volatile Organic Compounds | | | | | | | | | |
| Pentachlorophenol | 1 | 15 | | | 5 | | U | | 5 |
| Phenanthrene | NA | 1.3 | J | | 5 | | U | | 5 |
| Pyrene | NA | 0.73 | J | | 5 | | U | | 5 |
| PCBs/Pesticides | | | | | | | | | |
| 4,4'-DDT | NA | 0.0003 | JP | J | 0.02 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Endosulfan sulfate | NA | 0.00045 | JP | J | 0.02 | | | | |
| Endrin | 2 | 0.0017 | J | J | 0.02 | | | | |
| Endrin aldehyde | NA | 0.00099 | JP | J | 0.02 | | | | |
| gamma-Chlordane | 2 | 0.00058 | JP | J | 0.01 | | | | |
| Inorganics | | | | | | | | | |
| Barium | 2,000 | 140 | | B | 10 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Calcium | NA | 87,400 | | B | 5,000 | | | | |
| Iron | NA | 2,200 | | | 100 | | | | |
| Magnesium | NA | 45,600 | | B | 5,000 | | | | |
| Manganese | NA | 36.9 | | B | 10 | | | | |
| Sodium | NA | 20,400 | | B | 5,000 | | | | |

Notes:

All results in micrograms per liter (ug/l).

A blank cell indicates parameter not detected.

Only detected compounds listed.

Gray shaded boxes indicate compound not analyzed

Bold result indicates exceedance of MCL.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

U = Compound not detected above RL

J = Estimated value

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

DV Column Flags

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-B
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | PW-B | | | |
|---------------------------------|-----------------|--------|----|----|-------|
| | | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| Acetone | NA | 1.4 | J | | 3 |
| Chlorobenzene | 100 | 0.04 | J | | 0.5 |
| Xylene (total) | 10,000 | 0.068 | J | | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| alpha-BHC | 0.2 | 0.0011 | JP | J | 0.01 |
| Inorganics | | | | | |
| Calcium | NA | 86,700 | | B | 5,000 |
| Copper | 1,300 | 48.1 | | B | 5 |
| Iron | NA | 3,080 | | | 100 |
| Lead | 15 | 12.9 | | B | 3 |
| Magnesium | NA | 41,700 | | B | 5,000 |
| Manganese | NA | 59.5 | | B | 10 |
| Nickel | NA | 1.1 | B | | 5 |
| Silver | NA | 1 | B | | 5 |
| Sodium | NA | 20,200 | | B | 5,000 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

J, B(inorganics only) = Estimated value

B = Indicates analyte detected in laboratory blank

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

DV Column Flags

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-C
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA | PW-C | | | |
|---------------------------------|----------|---------|----|----|-------|
| | MCL | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| 1,1,2-Trichloroethane | 5 | 0.78 | | | 0.5 |
| Acetone | NA | 1.2 | J | | 3 |
| Carbon Disulfide | NA | 0.19 | J | | 0.5 |
| Chlorobenzene | 100 | 0.04 | J | | 0.5 |
| Chloroform | NA | 0.063 | J | | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| gamma-Chlordane | 2 | 0.00042 | JP | J | 0.01 |
| Inorganics | | | | | |
| Barium | 2,000 | 170 | | B | 10 |
| Calcium | NA | 89,100 | | B | 5,000 |
| Iron | NA | 2,640 | | | 100 |
| Magnesium | NA | 51,400 | | B | 5,000 |
| Manganese | NA | 36.9 | | B | 10 |
| Sodium | NA | 19,700 | | B | 5,000 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

J = Estimated value

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

DV Column Flags

B = Compound was detected in sample and in associated blank.

J = Concentration considered to be an estimated value.

Summary of Detections in Residential Well PW-D
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA | PW-D | | | |
|---------------------------------|----------|--------|----|----|-------|
| | MCL | Sep-03 | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | |
| Acetone | NA | 1.8 | J | | 3 |
| Carbon Disulfide | NA | 0.08 | J | | 0.5 |
| Tetrachloroethene | 5 | 0.046 | J | | 0.5 |
| Semi-Volatile Organic Compounds | | | | | |
| None detected | | | | | |
| PCBs/Pesticides | | | | | |
| None detected | | | | | |
| Inorganics | | | | | |
| Barium | 2,000 | 160 | | B | 10 |
| Calcium | NA | 96,100 | | B | 5,000 |
| Iron | NA | 2,440 | | | 100 |
| Magnesium | NA | 50,400 | | B | 5,000 |
| Manganese | NA | 36.8 | | B | 10 |
| Sodium | NA | 19,600 | | B | 5,000 |

Notes:

All results in micrograms per liter (ug/l).

Only detected compounds listed.

MCL = Maximum Contaminant Level

NA = MCL does not exist for this analyte

RL = Reporting Limit

LQ = Data qualifier added by laboratory (see below)

DV = Data qualifier added by validation (see below)

LQ Column Flags

J = Estimated value

DV Column Flags

B = Compound was detected in sample and in associated blank.

Summary of Detections in Residential Well PW-Y
September 2003
American Chemical Service NPL Site, Griffith, Indiana

| Parameter | U.S. EPA MCL | Sep-03 | | | | Nov-03 | | | |
|---------------------------------|-----------------|---------|----|----|-------|---|----|----|----|
| | | Results | LQ | DQ | RL | Results | LQ | DQ | RL |
| Volatile Organic Compounds | | | | | | | | | |
| 4-Methyl-2-pentanone | NA | 1.5 | J | | 3 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Bromodichloromethane | NA | 5.5 | | | 0.5 | | | | |
| Chloroform | NA | 8.1 | | | 0.5 | | | | |
| Dibromochloromethane | NA | 3.1 | | | 0.5 | | | | |
| Semi-Volatile Organic Compounds | | | | | | | | | |
| Pentachlorophenol | 1 | 2.7 | J | | 5 | | U | | 5 |
| PCBs/Pesticides | | | | | | | | | |
| delta-BHC | 0.2 | 0.004 | JP | J | 0.009 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Endosulfan I | NA | 0.0022 | J | | 0.01 | | | | |
| Endosulfan II | NA | 0.0022 | J | | 0.02 | | | | |
| Endosulfan sulfate | NA | 0.00091 | JP | J | 0.02 | | | | |
| Inorganics | | | | | | | | | |
| Aluminum | NA | 70.1 | B | | 200 | Not re-sampled because there were no MCL exceedances in the original sample | | | |
| Calcium | NA | 37,700 | | B | 5,000 | | | | |
| Copper | 1,300 | 56.7 | | B | 5 | | | | |
| Cyanide | 200 | 2.2 | B | | 10 | | | | |
| Iron | NA | 24 | B | | 100 | | | | |
| Magnesium | NA | 11,900 | | B | 5,000 | | | | |
| Zinc | NA | 273 | E | J | 20 | | | | |

Notes:

All results in micrograms per liter (ug/l)

A blank cell indicates parameter not detected

Only detected compounds listed.

Gray shaded boxes indicate compound not analyzed

Bold result indicates exceedance of MCL

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LQ Column Flags

J, B(inorganics only) = Estimated value

B = Indicates analyte detected in laboratory blank

P = The Relative Percent Difference between the two GC column values is greater than 40%. Higher value has been reported.

DV Column Flags

B = Compound was detected in sample and in associated blank

J = Concentration considered to be an estimated value.

Residential Well Sampling Information
American Chemical Service NPL Site, Griffith, Indiana

| Well ID | Address | Occupant | Phone | Landlord/Owner | Sample Location |
|---------|-----------------|-------------------------------|----------------|-------------------------------|--|
| PW-Y | 1002 Reder Road | New tenants, names unknown | Unknown | Ron Austgen (219-924-7528) | Outside spigot on north (rear) side of house. Connected to city water in May 2003. |
| PW-A | 1007 Reder Road | Brison (Karen) | (219) 934-9162 | Max Hanson | Newer residents, rent but plan to buy. Outside spigot on west side of house. They do not drink the water. |
| PW-B | 1009 Reder Road | James Garmon | (219) 924-2105 | Owner | Outside spigot on south (front) side of house next to front |
| PW-C | 1029 Reder Road | Charles Gregory | (219) 934-9121 | Owner | Outside spigot on east side of house, near well. |
| PW-D | 1033 Reder Road | Frank Floyd | (219) 924-5488 | Owner | Spout inside shed located against north (rear) side of house. Sample before water treatment system. New well installed in 1996, approx. depth 75 feet. |

Updated: Jan. 14, 2004

Address for Ron Austgen: 801 East Main Street, Griffith, Indiana, 46319